

Abstract of the Disclosure

A tire noise reducing system comprises a wheel rim, a pneumatic tire to be mounted on the wheel rim to form an annular tire hollow, and a noise damper to be disposed in the annular tire hollow, wherein the noise damper is a liquid under use conditions, and the noise damper has a certain volume being capable of changing the cross sectional area of the annular tire hollow irregularly in the circumferential direction during rotating, whereby the mode, amplitude and frequency of resonance of the tire hollow are changed irregularly to damp the resonance. The tire noise reducing system may comprises an apparatus for injecting the foamable liquid damper into the tire hollow, which apparatus comprises a container for the foamable liquid damper, a high-pressure gas source to let the foamable liquid damper from the container, and a nozzle for discharging a mixture of the liquid damper and high-pressure gas foam to be injected into the tire hollow.